

## RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.

Application Serial Number: 10/551,209  
Source: P4/10  
Date Processed by STIC: 10/20/05

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PCT

## RAW SEQUENCE LISTING

DATE: 10/20/2005

PATENT APPLICATION: US/10/551,209

TIME: 09:36:27

Input Set : D:\Final Sequence Listing.txt

Output Set: N:\CRF4\10202005\J551209.raw

3 <110> APPLICANT: Epimmune Inc.  
 4 Baker, Denise M.  
 5 Livingston, Brian D.  
 6 Chesnut, Robert W.  
 7 Sette, Alessandro  
 8 Newman, Mark J.  
 10 <120> TITLE OF INVENTION: Methods of Identifying Optimal Variants of Peptide Epitopes  
 12 <130> FILE REFERENCE: 2060.026PC01  
 C--> 14 <140> CURRENT APPLICATION NUMBER: US/10/551,209  
 C--> 15 <141> CURRENT FILING DATE: 2005-09-28  
 17 <150> PRIOR APPLICATION NUMBER: 60/458,026  
 18 <151> PRIOR FILING DATE: 2003-03-28  
 20 <160> NUMBER OF SEQ ID NOS: 1946  
 22 <170> SOFTWARE: PatentIn version 3.3  
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 58 <223> OTHER INFORMATION: Tetanus toxoid  
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 62 Gln Tyr Ile Lys Ala Asn Ser Lys Phe Ile Gly Ile Thr Glu  
 63 1 5 10  
 66 <210> SEQ ID NO: 4  
 67 <211> LENGTH: 21

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77 Asn Val Val Asn Ser
78           20
81 <210> SEQ ID NO: 5
82 <211> LENGTH: 16
83 <212> TYPE: PRT
84 <213> ORGANISM: Streptococcus sp.
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88 Gly Ala Val Asp Ser Ile Leu Gly Gly Val Ala Thr Tyr Gly Ala Ala
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101 <220> FEATURE:
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103 <222> LOCATION: (1)..(1)
104 <223> OTHER INFORMATION: X can be D-alanine or L-alanine.
106 <220> FEATURE:
107 <221> NAME/KEY: PEPTIDE
108 <222> LOCATION: (3)..(3)
109 <223> OTHER INFORMATION: X can be cyclohexylalanine, phenylalanine, or tyrosine.
111 <220> FEATURE:
112 <221> NAME/KEY: PEPTIDE
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114 <223> OTHER INFORMATION: X can be tryptophan, tyrosine, histidine, or asparagine.
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117 <221> NAME/KEY: PEPTIDE
118 <222> LOCATION: (13)..(13)
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263 <212> TYPE: PRT  
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277 <212> TYPE: PRT  
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286 1 5  
289 <210> SEQ ID NO: 19  
290 <211> LENGTH: 9  
291 <212> TYPE: PRT  
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356 1 5  
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RAW SEQUENCE LISTING ERROR SUMMARY  
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

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 Seq#:505; Xaa Pos. 417  
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**Invalid <213> Response:**

Use of "Artificial" only as "<213> Organism" response is incomplete,  
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

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RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/551,209

DATE: 10/20/2005  
TIME: 09:36:28

Input Set : D:\Final Sequence Listing.txt  
Output Set: N:\CRF4\10202005\J551209.raw

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Seq#:1921,1922,1923,1924,1925,1926,1927,1928,1929,1930,1931,1932,1933,1934  
Seq#:1935,1936,1937,1938,1939,1940,1941,1942,1943,1944,1945,1946

## VERIFICATION SUMMARY

DATE: 10/20/2005

PATENT APPLICATION: US/10/551,209

TIME: 09:36:28

Input Set : D:\Final Sequence Listing.txt

Output Set: N:\CRF4\10202005\J551209.raw

L:14 M:270 C: Current Application Number differs, Replaced Current Application Number  
 L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
 L:123 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0  
 L:432 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0  
 L:462 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0  
 L:487 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:0  
 L:512 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0  
 L:537 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:0  
 L:567 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:0  
 L:592 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:0  
 L:617 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:0  
 L:647 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:0  
 L:672 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:0  
 L:697 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:0  
 L:727 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:0  
 L:752 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:0  
 L:772 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:0  
 L:834 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44 after pos.:0  
 L:882 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:0  
 L:930 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:0  
 L:979 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:0  
 L:6783 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:319 after pos.:0  
 L:9463 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:338 after pos.:400  
 L:11227 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:351 after pos.:368  
 L:11958 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:357 after pos.:0  
 M:341 Repeated in SeqNo=357  
 L:17709 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:401 after pos.:224  
 M:341 Repeated in SeqNo=401  
 L:19611 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:415 after pos.:224  
 L:25306 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:457 after pos.:64  
 M:341 Repeated in SeqNo=457  
 L:28820 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:477 after pos.:336  
 L:35106 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:505 after pos.:416  
 L:39622 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:524 after pos.:0  
 M:341 Repeated in SeqNo=524  
 L:40898 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:529 after pos.:544  
 L:43595 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:541 after pos.:336  
 M:341 Repeated in SeqNo=541  
 L:49656 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:568 after pos.:96  
 M:341 Repeated in SeqNo=568  
 L:56878 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:600 after pos.:48  
 L:62844 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:626 after pos.:544  
 L:63040 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:627 after pos.:400  
 L:63986 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:631 after pos.:560  
 L:65456 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:643 after pos.:80  
 L:66118 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:653 after pos.:192  
 L:66158 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:654 after pos.:64  
 L:66610 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:661 after pos.:80

**VERIFICATION SUMMARY**

**PATENT APPLICATION: US/10/551,209**

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**Input Set : D:\Final Sequence Listing.txt**

**Output Set: N:\CRF4\10202005\J551209.raw**

L:67290 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:672 after pos.:0  
L:68014 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:683 after pos.:64  
L:68214 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:686 after pos.:96  
L:68602 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:691 after pos.:0